

Reading assignment  
Cardiovascular Physiology  
Fall 2011  
Paul H. Brand, Ph.D.

Text: Berne & Levy Physiology, edited by B.M Koeppen and B.A. Stanton, 6<sup>th</sup> edition 2008

There are many equations in the textbook that are not presented in lecture. You are only responsible for equations or calculations presented in lecture.

Lecture	Chapter
Introduction	15: Overview of Circulation, p. 289 - 291
Cardiac electrophysiology	16: Elements of Cardiac Function, Electrical properties of the heart, p. 292 - 302
Heart as a pump	16: Elements of Cardiac Function, The Cardiac Pump, p. 317 - 329. 18: Regulation of the Heart and Vasculature, Regulation of heart rate and contractility, p. 370 – 383.
Introduction to electrocardiography	16: Elements of Cardiac Function, Electrocardiography, p. 310 - 317
Hemodynamics & Arterial system	17: Properties of the vasculature, p. 330 - 342
Regulation of arterial pressure	18: Regulation of the heart and vasculature, Regulation of the peripheral circulation, p. 383 - 392
Regulation of peripheral circulation	18: Regulation of the heart and vasculature, Regulation of the peripheral circulation, p. 383 - 392
Microcirculation	17: Properties of the vasculature, p. 343 - 352
Venous system	17: Properties of the vasculature, p. 342 - 343
Integrated control of cardiovascular function	19: Integrated control of the cardiovascular system, p. 393 – 408 (Through “Venous Return”).

Questions? [paul.brand@utoledo.edu](mailto:paul.brand@utoledo.edu)

#### Optional

LS Lilly, Pathophysiology of Heart Disease, 4<sup>th</sup> Edition, Lippincott Williams & Wilkins, 207.  
Introduces clinical cardiology in the context of physiology, for third year medical students. Well written.